

IN THE CLAIMS

Please amend the claims as follows:

1 (Currently Amended): An emulsion composition comprising:

(A) a water-based solvent,

(B) a hydrophobic organic solvent,

(C) a sulfonic group-containing polymer soluble in the component (A), and

(D) a polymer soluble in the component (B) but insoluble in water, wherein said component (A) is present in an amount of from 1 to 98% by weight relative to 100% by weight of component (A) and component (B).

2 (Previously Presented): The emulsion composition according to Claim 1, wherein the component (D) is an amino group-containing polymer.

3 (Previously Presented): The emulsion composition according to Claim 1, which is a water-in-oil emulsion and wherein the component (B) has a vapor pressure higher than the vapor pressure of the component (A) at least at a certain temperature T_{d1} .

4 (Previously Presented): The emulsion composition according to Claim 1, which is a water-in-oil emulsion and wherein a volume of the component (C) is larger than the volume of the component (D).

5 (Previously Presented): The emulsion composition according to Claim 1, which is an oil-in-water emulsion and wherein the component (B) has a vapor pressure lower than the vapor pressure of the component (A) at least at a certain temperature T_{d2} .

6 (Previously Presented): The emulsion composition according to Claim 1, which is an oil-in-water emulsion and wherein a volume of the component (C) is smaller than the volume of the component (D).

7 (Previously Presented): The emulsion composition according to Claim 1, which has a volume resistance after drying, of 10^{-2} to $10^3 \Omega \cdot \text{cm}$.

8 (Withdrawn – Previously Presented): A coating material comprising the emulsion composition set forth in Claim 1.

9 (Withdrawn – Previously Presented): A film obtained by a process comprising removing, from an emulsion composition set forth in Claim 1, the component (A) and the component (B).

10 (Withdrawn – Previously Presented): A high-molecular solid electrolyte obtained by a process comprising removing, from an emulsion composition set forth in Claim 1, the component (A) and the component (B).

11 (Withdrawn – Previously Presented): A filter obtained by a process comprising removing, from an emulsion composition set forth in Claim 1, the component (A) and the component (B).

12 (Cancelled):

13 (Previously Presented): The emulsion composition according to Claim 1, wherein said component (A) comprises at most 50% by weight of at least one water-soluble organic solvent selected from the group consisting of methanol, ethanol, isopropanol, n-butanol, methyl lactate, ethyl lactate, propylene glycol monomethyl ether acetate, propylene glycol monoethyl ether acetate, propylene glycol monopropyl ether acetate, propylene glycol monobutyl ether acetate, ethyl cellosolve, butyl cellosolve, butyl carbitol, N-dimethylformamide, N-methylacetamide, N,N-dimethylacetamide, N-methylpyrrolidone, γ -butyrolactone, tetrahydrofuran, and dimethyl sulfoxide.

14 (Previously Presented): The emulsion composition according to Claim 1, wherein said component (B) is present in an amount of from 2 to 99% by weight relative to 100% by weight of component (A) and component (B).

15 (Previously Presented): The emulsion composition according to Claim 1, wherein said component (B) is at least one member selected from the group consisting of a straight chain aliphatic hydrocarbon of 6 to 12 carbon atoms, a branched chain aliphatic hydrocarbon of 6 to 12 carbon atoms, a cyclic aliphatic hydrocarbon of 6 to 12 carbon atoms, a halogenated hydrocarbon of 1 to 8 carbon atoms, toluene, xylene 2-heptanone, 3-heptanone, 4-heptanone, cyclohexanone, n-propyl lactate, isopropyl lactate, ethyl acetate, n-propyl acetate, isopropyl acetate, n-butyl acetate, isobutyl acetate, n-amyl acetate, isoamyl acetate, isopropyl propionate, n-butyl propionate, isobutyl propionate, methyl 3-methoxypropionate, ethyl 3-methoxypropionate, methyl 3-ethoxypropionate, ethyl 3-ethoxypropionate, methyl pyruvate, ethyl pyruvate, propylene glycol dimethyl ether, propylene glycol diethyl ether, propylene glycol dipropyl ether, propylene glycol dibutyl ether, ethylene glycol monomethyl ether acetate, ethylene glycol monoethyl ether acetate, propylene glycol monomethyl ether,

propylene glycol monoethyl ether, propylene glycol monopropyl ether, propylene glycol monobutyl ether, and n-hexanol.

16 (Previously Presented): The emulsion composition according to Claim 1, wherein said component (C) is present in an amount of from 10 to 90% by weight relative to 100% by weight of component (C) and component (D).

17 (Previously Presented): The emulsion composition according to Claim 1, wherein component (C) is at least one member selected from the group consisting of a sulfonation product of polybutadiene, a sulfonation product of polyisoprene, a sulfonation product of polystyrene, a sulfonation product of a styrene-butadiene copolymer, a sulfonation product of a hydrogenated styrene-butadiene copolymer, a sulfonation product of a styrene-maleic acid copolymer, a sulfonation product of a styrene-acrylic acid copolymer, a sulfonation product of a ketone resin of acetophenone, a sulfonation product of an aromatic polyimide resin, a sulfonation product of a polyethersulfone resin, and the like; a (co)polymer of isoprenesulfonic acid, a (co)polymer of acrylamide-2-methylpropanesulfonic acid, and a fluorinated polymer having a sulfonic group.

18 (Previously Presented): The emulsion composition according to Claim 1, wherein said component (C) has a molecular weight of least 2 000 or more.

19 (Previously Presented): The emulsion composition according to Claim 1, wherein said component (D) is present in an amount of from 10 to 90% by weight relative to 100% by weight of component (C) and component (D).

20 (Previously Presented): The emulsion composition according to Claim 1, wherein said component (D) is at least one member selected from the group consisting of polyethylene, polypropylene, polyisobutylene, polybutadiene, polybutene, polystyrene, polyxylene, polyvinyl chloride, polyvinylidene chloride, polyacrylonitrile, polyvinyl acetal, polyacrylate, polyvinylcarbazole, polyethylene terephthalate, polycarbonate, polyurethane, nylon, aromatic polyimide, aromatic polyamide, aromatic polyamideimide, polyarylate, polyetherimide, polyetheretherketone, polysulfone, polyethersulfone, polyphenylene oxide, polyphenylene sulfide, fluoropolymer, a silicone polymer, a copolymer thereof, a block polymer thereof, a graft polymer thereof, a modified polymer thereof, and a hydrogenated polymer thereof.

21 (Previously Presented): The emulsion composition according to Claim 1, wherein said sulfonic group-containing polymer has a sulfonic group content of 1 mmol/g or more.

22 (Previously Presented): The emulsion composition according to Claim 1, wherein said sulfonic group-containing polymer has a sulfonic group content of 3 mmol/g or more.

23 (Previously Presented): The film according to Claim 9, wherein said sulfonic group-containing polymer has a sulfonic group content of from 0.2 to 4 mmol/g.

24 (Previously Presented): The emulsion composition according to Claim 21, having a residual film ratio of at least 50% when in the form of a film, said residual film ratio measured by:

casting the emulsion composition in an ethylene tetrafluoride polymer cast;
drying a film in the cast at 25°C for a period of 24 hours;

heat-treating said film at a temperature of 150°C for a period of 1 hour;
aging said film at a relative humidity of 60% at 25°C for a period of 24 hours;
immersing said film in 95°C water for a period of 2 hours;
weighing said film prior to said immersing; and
weighing said film after said immersing,
wherein said residual film ratio is the weight change determined from said weighing
said film prior to said immersing and said weighing said film after said immersing.